

Application No.: 10/692,584
Response Dated: May 26, 2009
Office Action Dated: December 26, 2008

REMARKS

This is in response to the Office Action dated December 26, 2008, for which a three (3) month period for response was given. A Petition and fee for a two (2) month extension of time accompany this paper. Also enclosed herewith is a Request for Continued Examination (RCE) and a fee for same. The Commissioner is hereby authorized to charge the extension of time and RCE fees to Deposit Account No. 50-0959, Attorney Docket No. 089498.0447.

Claims 11 through 20 are pending in the application upon entry of this amendment. Claims 1 through 10 were previously canceled. Claim 11 has been amended for clarification purposes. Support for the amendments to claim 11 can be found, for example, in the specification at page 6, lines 17 through 32, and in the Examples. As such, no new matter has been added to claim 11. In view of the above, entry and consideration of the amended claims and the remarks which follow is believed due and is respectfully requested.

I. The 35 U.S.C. § 103(a) Rejections:

Claims 11 through 20 have been rejected under 35 U.S.C. § 102(b) over Kobayashi et al. (United States Patent No. 6,139,948) in view of Okabe et al. (United States Patent No. 4,725,472).

Kobayashi et al. relates to a coated aliphatic polyester film which is degradable in a natural environment, has good blocking resistance and is excellent in the durability of membrane effect due to small coefficient of variation in the membrane thickness. Specifically, the Examiner contends that Example 1-4 of Kobayashi et al. teaches a process whereby polylactic acid and silica particles is blended, pelletized, and extruded as a film, and biaxially stretched at 70°C.

However, further review of the disclosure of Kobayashi et al., including all the Examples and Comparative Examples contained therein, clearly reveals that Kobayashi et al. fails to disclose, teach or suggest the process of amended claim 11. That is, Kobayashi et al. fails to disclose, teach or suggest a process for controlling the strain hardening properties of a polymer that includes, among other steps, both: (i) a

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quenching step at a temperature below the glass transition temperature of the polymer to yield an amorphous polymeric composition, and (ii) a strain hardening step conducted in a rubbery state by stretching the film at a temperature between the glass transition temperature and the cold crystallization temperature of the polymer composition that forms part of the polymeric composition (emphasis supplied).

Turning to Okabe et al., Okabe et al. discloses a biaxially oriented polyester film that is useful as a substrate for magnetic recording tapes such as audio and video tapes. Specifically, the Examiner contends that Okabe et al. discloses preparing a biaxially oriented polyester film containing inert inorganic particles and/or internal particles by melt-extruding the polyester at a temperature of 270°C to 300°C and then quenching the melt extrudate on a casting drum to obtain a sheet or film. This sheet, or film, is then biaxially drawn at a temperature of from 70°C to 160°C. Finally, the resultant drawn film is heat-set at a temperature of 150°C to 240°C (see column 4, lines 15 through 25). Given this disclosure, the Examiner contends that one of ordinary skill in the art would recognize that the step in which the film of Kobayashi et al. is cooled on a casting roll at 30°C is a quenching step.

However, regardless of whether this proposition is true, Okabe et al. fails to cure the deficiencies of Kobayashi et al. This is because Okabe et al. fails to disclose, teach or suggest the process of amended claim 11. That is, Okabe et al. fails to disclose, teach or suggest a process for controlling the strain hardening properties of a polymer that includes, among other steps, both: (i) a quenching step at a temperature below the glass transition temperature of the polymer to yield an amorphous polymeric composition, and (ii) a strain hardening step conducted in a rubbery state by stretching the film at a temperature between the glass transition temperature and the cold crystallization temperature of the polymer composition that forms part of the polymeric composition (emphasis supplied).

Given the above deficiencies of both Kobayashi et al. and Okabe et al., this combination of art cannot render obvious claims 11 through 20. As such, claims 11 through 20 are believed to be patentable over any combination of Kobayashi et al. and Okabe et al. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claims 11

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through 20 over Kobayashi et al. and Okabe et al. is believed to be due and is respectfully requested.

Claims 11 through 20 have been rejected under 35 U.S.C. § 102(b) over Qian et al. (United States Patent No. 6,407,155) in view of Haruta et al. (United States Patent No. 3,773,609) or Ishibashi et al. (United States Patent No. 5,180,626).

Qian et al. discloses a method of preparing intercalated layered materials, prepared by coupling agent reaction of a layered material and co-intercalation of an onium ion spacing/compatibilizing agent (preparing CAO Material) and co-intercalation of the CAO Material with an oligomer or polymer into the galleries of the layered materials to form intercalates or intercalate concentrate compositions. As disclosed therein, Qian et al. also discloses the formation of nanocomposites. As is properly recognized by the Examiner Qian et al. does not disclose, teach or suggest process of biaxially stretching a polymer film. In light of this, the Examiner turns to the disclosures of Haruta et al. and/or Ishibashi et al.

Both Haruta et al. and Ishibashi et al. disclose conventional processes for preparing biaxially stretched polypropylene films. However, as will be detailed below, neither Haruta et al. nor Ishibashi et al. cure the deficiencies of Qian et al.

This is because none of the above three pieces of cited art disclose, teach or suggest the process of amended claim 11. That is, neither Qian et al., Haruta et al. nor Ishibashi et al. disclose, teach or suggest a process for controlling the strain hardening properties of a polymer that includes, among other steps, both: (i) a quenching step at a temperature below the glass transition temperature of the polymer to yield an amorphous polymeric composition, and (ii) a strain hardening step conducted in a rubbery state by stretching the film at a temperature between the glass transition temperature and the cold crystallization temperature of the polymer composition that forms part of the polymeric composition (emphasis supplied).

Given the above deficiencies of Qian et al., Haruta et al. and/or Ishibashi et al., this combination of art cannot render obvious claims 11 through 20. As such, claims 11 through 20 are believed to be patentable over any combination Qian et al., Haruta et al. and/or Ishibashi et al. Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of

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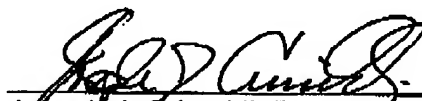
II. Conclusion:

For at least the foregoing reasons, the claim objections and rejections under 35 U.S.C. § 103(a) are believed to be unfounded, and withdrawal thereof is believed due and is respectfully requested.

For at least the foregoing reasons, the present application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

Should the Examiner wish to discuss any of the foregoing in more detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



Joseph J. Crimaldi, Reg. No. 41,690
Roetzel & Andress, LPA
222 S. Main St.
Akron, Ohio 44308
(330) 376-2700

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